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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,920	09/19/2003	Hannu Hakkinen	944-003.154-1	6487
4955	7590	08/03/2005	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			SCHEIBEL, ROBERT C	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,920

Applicant(s)

HAKKINEN ET AL.

Examiner

Robert C. Scheibel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20,25,28 and 31-34 is/are allowed.
- 6) ☒ Claim(s) 26,27,29,30 and 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments regarding claims 1-34, see pages 13-14, filed 3/16/2005, have been considered and are persuasive.
2. Applicant's arguments regarding claims 35-40, see pages 14-16, filed 3/16/2005, have been considered and are persuasive. Applicant argued that new claims 35-40 are allowable over the prior art of record. However, claims 35-40 are rejected in view of newly found art (U.S. Patent Application Publication Number 2004/0004954 to Terry et al).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims **21-24, 26-27, 29-30, and 36-37** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim **21** recites the limitation "the indication symbols" in line 2 and in line 5 ("or symbols"). There is insufficient antecedent basis for this limitation in the claim.

Claim **22** recites the limitation "the indication symbols" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim **23** recites the limitation "the indication symbols" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim **24** is rejected as being dependent on indefinite claim 22.

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Claim 26 recites the limitation "the sequences of time intervals" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the time of receipt" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the data signal" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the indication symbols" in line 2 and in line 5 ("or symbols"). There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the sequences of time intervals" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the time of receipt" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the data signal" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 30 recites the limitation "the indication symbols" in line 3 and in line 5 ("or symbols"). There is insufficient antecedent basis for this limitation in the claim.

Claim 36 recites the limitation "the indication symbols" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 36 recites the limitation "the same communication channel" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 37 recites the limitation "small set" on line 3. This limitation is not definite as it is not clear what the bounds of the term "small" are. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims **35-40** are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Application Publication Number 2004/0004954 to Terry et al.

Regarding claim **35**, Terry discloses a method, comprising a step in which a signaling entity (12) (UE 605 of Figure 6) transmits to a signal-receiving entity (14) (Node-B 615 of Figure 6) in a current time interval a payload message (CQI – see Figures 7 and 8) including one or more payload symbols from a set of possible payload symbols for indicating signaling information (see the first sentence of paragraph 0049 for example), according to a first predetermined procedure; and a step in which the signaling entity (12) operates according to second predetermined procedure if no payload message transmitted in the current time interval (see lines 6-7 of paragraph 0051 which indicates that the TSN field is transmitted when the payload (CQI field) is not transmitted); wherein the second predetermined procedure includes transmitting one or more indication symbols each differing from each of the possible payload symbols (the signal receiving entity must be able to distinguish between these two types of information and thus the indication symbols (TSN field) differ from the payload symbols – see paragraph 0046 for example).

Regarding claim **36**, Figures 7 and 8 clearly show the limitation that the payload (CQI) and indication (TSN) symbols are transmitted on the same communication channel.

Regarding claim 37, Terry discloses the limitation that the payload symbols (CQI) are selected from a predetermined small set of possible payload symbols in the fact that the CQI field has a fixed size and thus the values are selected from a predetermined set of possible symbols.

Regarding claim 38, Terry discloses the limitation that the payload symbols and the indication symbols are sequences of equal length in Figures 7 and 8. Further, it is clear, given the embodiment where one bit differentiates between CQU and TSN reports (see the last line of paragraph 0046), that one of the payload (CQI) symbols will be further away on average from the indication (TSN) symbols.

Regarding claim 39, as stated above, UE 605 of Figure 6 discloses the signaling entity.

Regarding claim 40, Terry discloses the limitation that the signal-receiving entity is adapted to receive the indication symbols and to use the received indication symbols to determine the current state of the signalling entity. The TSN is actually a status report indicating the state (status) of the UE; the status report indicates the data that has actually been received by the UE and thus the current receiving state (see paragraph 0040 for example).

Allowable Subject Matter

7. Claims 1-20, 25, 28 and 31-34 are allowed.
8. Claims 26-27 and 29-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 9.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169. The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RCS 7-25-05
Robert C. Scheibel
Examiner
Art Unit 2666

DM
DANIEL M.
PRIMARY EXAMINER